

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
April 25, 2007

ITEM: 7

SUBJECT: **PUBLIC HEARING: TOTAL MAXIMUM DAILY LOADS (TMDLS) FOR COPPER, LEAD, AND ZINC IN CHOLLAS CREEK, TRIBUTARY TO SAN DIEGO BAY. (Tentative Resolution No. R9-2007-0043).** (*Benjamin Tobler*)

PURPOSE: To receive testimony and comments on appropriate TMDLs and wasteload allocations for copper, lead, and zinc in Chollas Creek, tributary to San Diego Bay. At the June 13, 2007 meeting, the San Diego Water Board may adopt an amendment to the Water Quality Control Plan for the San Diego Basin (9) (Basin Plan) to incorporate the TMDLs.

PUBLIC NOTICE: Federal Clean Water Act (CWA) regulations [40 CFR 25.5] require the San Diego Water Board to provide notice of a proposed Basin Plan amendment to all interested parties at least 45 days in advance of the public hearing. The State Water Board's California Environmental Quality Act (CEQA) implementation regulations [23 CCR 3777] require the San Diego Water Board to provide to the public a Notice of Filing of a written report on any standard, rule, regulation, or plan proposed for board approval or adoption at least 45 days prior to board action. The Notice of Filing and the Notice of Public Hearing for this Basin Plan amendment (Supporting Document 1) were provided by newspaper publication in the San Diego Union Tribune on March 9, 2007, 47 days in advance of the public hearing scheduled for April 25, 2007. The Notices were also distributed to interested parties by email and regular mail distribution. The draft Technical Report (including the draft Resolution and draft Basin Plan amendment) was available to the public on our website on March 9, 2007 (Supporting Documents 2, 3 and 4).

DISCUSSION: Project Status

The State Water Resources Control Board (State Water Board) remanded the Chollas Creek Metals TMDLs back to the California Regional Water Quality Control Board San Diego Region (San Diego Water Board) on May 2, 2006, for recirculation of the substitute environmental documents, to ensure that the public had adequate opportunity to comment on changes to the Environmental Checklist Form made after the close of the previous public comment period. The substitute environmental

documents were subsequently revised twice to ensure consistency with the Court of Appeal decision in the case of City of Arcadia vs. State Water Board. Two additional comment periods have been completed to obtain public input. The first public comment period opened July 25, 2006, and continued for 45 days. The second comment period opened March 9, 2007, (Supporting Document 1) and will continue until the San Diego Water Board adopts these TMDLs. Comments received since July 25, 2006, are included in Supporting Document 6.

The other important change to the TMDLs is the change in the compliance schedule from seven years to twenty years. The change was due to a request by the City of San Diego to allow the dischargers to engage in comprehensive BMP planning and implementation for all pollutants impairing Chollas Creek. This approach is preferred because it minimizes the number of structural BMPs needed and likewise minimizes the adverse environmental effects that result from installing structural BMPs. Although the compliance schedule is longer, this approach addresses multiple pollutants, not just metals. Because of the efficiency and minimal adverse effects expected from this approach, this is the preferred alternative.

Chollas Creek is an urban coastal stream in southern San Diego County, tributary to San Diego Bay (Supporting Document 5). Chollas Creek was placed on the section 303(d) List of Water Quality Limited Segments in 1996 for the metals cadmium,¹ copper, lead and zinc. The San Diego Water Board has established TMDLs for copper, lead, and zinc in Chollas Creek as required by the CWA for water quality limited segments. The technical basis for the TMDLs, Implementation Plan and Environmental Review of the most reasonably foreseeable methods of compliance with the TMDLs are discussed in the Technical Report.

The TMDLs and Allocations

The purpose of these TMDLs is to reduce copper, lead, and zinc concentrations in Chollas Creek as needed to attain the water quality objectives for toxicity and to restore the “warm freshwater habitat” (WARM) and “wildlife habitat” (WILD) beneficial uses of Chollas Creek.

Because aquatic toxicity is the most significant adverse effect of copper, lead, and zinc and because aquatic toxicity is a function of water column concentrations, these TMDLs are concentration-based, rather than mass emission-based. When additional information is available to calculate mass-based TMDLs, this project will be updated. The Numeric Targets are equal to the California Toxics Rule (CTR) water quality criteria for the

¹ Cadmium was de-listed in 2006.

protection of freshwater aquatic organisms from copper, lead, and zinc. Since metal toxicity varies with the hardness of the water, the Numeric Targets are equal to the formulas that establish the CTR criteria. This ensures that the CTR criteria are appropriately applied throughout space and time. The concentration-based TMDLs Waste Load Allocations were applied equally to all metal discharge sources in the Chollas Creek watershed. All allocations were set at 90 percent of the Numeric Targets resulting in a copper, lead and zinc allocation equal to 90 percent of the CTR criteria. These allocations include an explicit 10 percent margin of safety to account for uncertainties in the TMDL analysis. These concentration-based TMDLs and allocations apply year-round and will be protective during all flow conditions and seasons.

Implementation

Urban runoff is the primary source of metals to Chollas Creek. As dischargers of urban runoff to Chollas Creek, the cities of San Diego, Lemon Grove, and La Mesa, the San Diego Unified Port District, County of San Diego, the California Department of Transportation, and the U.S. Navy are responsible for implementation of these TMDLs. With the exception of the Navy, these entities are all regulated under Waste Discharge Requirements (WDRs) for Municipal Separate Storm Sewer Systems (MS4s) discharges. The urban stormwater discharges from the Navy community facilities on Naval Station San Diego will be regulated by enrolling the facility in the statewide WDRs for small MS4s.

Stormwater discharges from certain industrial facilities and groundwater extraction discharges could also contribute metals to Chollas Creek. Industrial stormwater discharges are regulated under statewide general WDRs, and groundwater discharges are regulated under San Diego Water Board general WDRs.

The TMDLs will be implemented by amending the appropriate WDRs that regulate stormwater and groundwater extraction discharges to be consistent with the Wasteload Allocations (WLA) and compliance schedule of these TMDLs. Dischargers have twenty years to implement BMPs and other actions to ensure that metals concentrations in their discharges do not exceed the WLAs and therefore do not contribute to an exceedance of the loading capacity of the creek. Source control and structural and non-structural BMPs are likely mechanisms to control metal discharges to Chollas Creek. Monitoring will be required to assess the efficacy of these measures. Some monitoring for metals is already taking place under Order No. R9-2004-0277 that resulted from the implementation of the Chollas Creek TMDL for Diazinon.

The scientific basis of these TMDLs has undergone external peer review pursuant to Health and Safety Code section 57004. The TMDL Unit has considered and responded to all comments

submitted by the peer review panel.

KEY ISSUES:

1. No Technical Changes. There is no change to the technical portions of the TMDL.
2. Compliance Schedule. The TMDL compliance schedule has increased from seven years to twenty years.
3. Adequacy of Environmental Analysis. The City of San Diego contends that the substitute environmental documents are inadequate because they don't specify what size design storm to use to size structural BMPs, how many structural BMPs are needed, or where in the watershed to locate BMPs. These issues should be addressed in the project level CEQA documents prepared by the dischargers when they begin planning and designing BMPs to comply with the TMDLs.
4. Structural BMPs Sizing. The City of San Diego claims that the only way to comply with the WLAs is to build large detention and treatment facilities in a limited number of locations that will require condemnation of private property to accommodate the BMPs. The substitute environmental documents did not directly evaluate this strategy because the expense in condemning property makes it undesirable when smaller BMPs such as the Austin type sand filter can be installed at storm drain inlets.

LEGAL CONCERNS:

None.

SUPPORTING
DOCUMENTS:

1. Notice of Filing and Notice of Public Hearing, March 5, 2007.
2. Tentative Resolution No. R9-2007-0043 and Attachment A, Draft Basin Plan Amendment.
3. Technical Report.
4. Appendices A through L to the Technical Report.
5. Location Map of Chollas Creek.
6. Comment Letters Received as of July 25, 2006.

RECOMMENDATION(S):

Close the public comment period on the Chollas Creek TMDLs and direct staff to provide responses to written comments submitted by stakeholders.